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# **Amendments to the Drawings:**

The Amended drawings label Figures 7 and 8 as Figures 7a, 7b, etc. and 8a, 8b, etc.

Attachment: Replacement Sheets

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#### REMARKS

This Amendment is in response to the final Office Action dated December 31, 2008 (the Action). The Drawings are objected to on page 2 of the Action, and Claims 13, 16 and 17 are objected to on pages 2-3 of the Action for various informalities. Claims 1-6, 8-10 and 12-18 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,354,560 to Johnson (Johnson). Claim 7 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of U.S. Patent No. 5,580,188 to Nowak (Nowak).

A Request for Reconsideration is filed herewith and entry of the above amendments is respectfully requested. Support for the above amendments can be found in the application, for example, on page 10, lines 30-34.

Reconsideration is respectfully requested in view of the amendments above and the remarks that follow.

### I. The Drawings

Replacement drawings are submitted herewith in which Figures 7 and 8 are relabeled as Figures 7a, 7b, etc. and 8a, 8b, etc. to address the objection on page 2 of the Action.

Applicants request that the objection to the drawings be withdrawn.

### II. The Claim Objections

The Action states that Claim 13 is objected to because the recitation "a ready made bore" is in view of Claim 1 already reciting "a ready made bore." However, Claim 13 does not depend from Claim 1. Upon review of the claims, it appears that the objection should be made with respect to Claim 3 rather than Claim 13. Accordingly, Claim 3 is amended to recite "the ready made bore." If further corrections are required, the Examiner is courteously invited to contact the undersigned in order to expeditiously address any additional informalities.

The dependencies of Claims 16 and 17 have been amended as requested on page 3 of the Action.

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Accordingly, Applicants request that the objections to the claims be withdrawn in view of the amendments above.

## III. The Section 102/103 Rejections

Claim 1 recites as follows (emphasis added):

as the bore is drilled, <u>directing substantially all</u> waste <u>material along the ready made through bore in the direction of advancement via the gas to the further region</u>.

The Action takes the position that the waste material in Johnson "will eventually be directed in a direction opposite to the direction of advancement (but not before it inherently travels in the direction of advance[ment] first)." *See* the Action, page 3. As best understood, the Action is taking the position that during drilling, waste material will be directed in the direction of advancement for a short period of time before hitting the bottom of the hole and being directed in an opposite direction.

Accordingly, Applicants have amended the independent Claims 1, 9 and 18 to recite that <u>substantially all of the waste material</u> is directed <u>in the direction of advancement via the gas</u> to the further region. Applicants submit that the <u>de minimis</u> direction of waste material in the direction of advancement for a short period of time that is alleged by the Action to exist in Johnson does not disclose that <u>substantially all of the waste material</u> is directed in the direction of advancement as recited in Claims 1, 9 and 18.

According to embodiments of the invention, in a potentially hazardous environment, the waste material is not directed back into a region where the drill is located, which could be

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hazardous to personnel. Such a feature is not taught or considered by the disclosure of Johnson.

The missing elements of Johnson are not disclosed by Nowak, which is cited with respect to Claim 7.

Accordingly, Applicants submit that Johnson and Nowak do not disclose that substantially all of the waste material is directed in the direction of advancement as recited in the independent claims and request that the rejection of independent Claims 1, 9 and 18 and Claims 2-8, 10 and 12-17 depending therefrom be withdrawn.

### IV. New Claims 21-23

Support for new Claims 21-23 can be found, for example, in the specification on page 10, lines 30-34.

Claims 21-23 depend from independent Claims 1, 9 and 18, respectively, and are patentable at least per the patentability of Claims 1, 9 and 18 discussed above. In addition, Claims 21-23 are separately patentable for at least the following reasons. Claim 21 recites that the waste material is substantially prevented from moving in a direction opposite the direction of advancement. Claims 22 and 23 recite that the at least one aperture in the drill bit is configured to direct gas in the direction of advancement of the drill bit such that the waste material is substantially prevented from moving in a direction opposite the direction of advancement.

The Action states on page 3 that <u>Johnson discloses that "the waste material will</u> <u>eventually be directed in a direction opposite to the direction of advancement (but not before it inherently travels in the direction of advance[ment] first." Accordingly, Johnson does <u>not</u> disclose that the waste material is <u>substantially prevented from moving in a direction opposite</u> the direction of advancement as recited in Claims 21-23.</u>

Accordingly, Applicants submit that Claims 21-23 are separately patentable and request an indication of same.

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### **CONCLUSION**

Accordingly, Applicants submit that the present application is in condition for allowance and the same is earnestly solicited. The Examiner is encouraged to telephone the undersigned at 919-854-1400 for resolution of any outstanding issues.

Respectfully submitted,

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#### **CERTIFICATION OF TRANSMISSION**

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4) to the U.S. Patent and Trademark Office on May 28, 2009.

Signature